



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,606	03/28/2006	Jo Klaveness	PN0368	6864
3635 7590 01/05/2010 GE HEALTHCARE, INC. IP DEPARTMENT 101 CARNEGIE CENTER PRINCETON, NJ 08540-6231				
EXAMINER				
PERREIRA, MELISSA JEAN				
ART UNIT		PAPER NUMBER		
1618				
MAIL DATE		DELIVERY MODE		
01/05/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/573,606

Applicant(s)

KLAVENESS ET AL.

Examiner

MELISSA PERREIRA

Art Unit

1618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/13/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-18, 20, 21 and 23-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-18, 20, 21 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claims 15-18,20,21 and 23-25 are pending in the application. Any objections and/or rejections from previous office actions that have not been reiterated in this office action are obviated.

Response to Arguments

1. Applicant's arguments filed 10/13/09 have been fully considered but they are not persuasive.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 15-18,20,21 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marten et al. (*Gastroenterol.* **2002**, 122, 406-414) in view of Klaveness et al. (US 6,610,269B1) and further in view of Waggoner et al. (US 6,008,373) as stated in the action mailed 7/15/09.
4. Applicant asserts that the amended claim 25 is now limited to c-Met as the biological target associated with the optical imaging of CRC. Applicant asserts that Marten et al., Klaveness et al. and Waggoner et al. are believed silent on c-Met.
5. Klaveness et al. teaches of contrast agents of formula V-L-R where V is a targeting vector moiety (i.e. peptide or non-peptide), L is a linker moiety (i.e. PEG) and

R is a detectable reporter moiety/moieties (i.e. cyanine dye) for in vivo imaging where the contrast agents of the disclosure are used for in vivo imaging of diseases associated with angiogenesis. Klaveness et al. teaches that the contrast agents have a targeting vector moiety which binds to receptors associated with angiogenesis, such as c-Met/hepatocyte growth factor receptor (Klaveness et al. column 1, lines 9-19; table 1). Therefore, at the time of the invention it would have been obvious to one ordinarily skilled in the art to utilize the contrast agents/probes of the combined disclosures to target c-Met/hepatocyte growth factor receptor for the in vivo imaging of diseases associated with angiogenesis.

6. Claims 15-18,20,21 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weissleder et al. (*Nature Biotech.* **1999**, *17*, 375-378) in view of Klaveness et al. (US 6,610,269B1) and further in view of Waggoner et al. (US 6,008,373) as stated in the action mailed 7/15/09.

7. Applicant asserts that the amended claim 25 is now limited to c-Met as the biological target associated with the optical imaging of CRC. Weissleder et al., Klaveness et al. and Waggoner et al. are believed silent on c-Met.

8. Klaveness et al. teaches of contrast agents of formula V-L-R where V is a vector moiety (i.e. peptide or non-peptide), L is a linker moiety (i.e. PEG) and R is a detectable reporter moiety/moieties (i.e. cyanine dye) for in vivo imaging where the contrast agents of the disclosure are used for in vivo imaging of diseases associated with angiogenesis. Klaveness et al. teaches that the contrast agents have a agents have a targeting vector

moiety which binds to receptors associated with angiogenesis, such as c-Met/hepatocyte growth factor receptor (Klaveness et al. column 1, lines 9-19; table 1). Therefore, at the time of the invention it would have been obvious to one ordinarily skilled in the art to utilize the contrast agents/probes of the combined disclosures to target c-Met/hepatocyte growth factor receptor for the in vivo imaging of diseases associated with angiogenesis.

Conclusion

9. No claims are allowed at this time.
10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELISSA PERREIRA whose telephone number is (571)272-1354. The examiner can normally be reached on 9am-5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Hartley/
Supervisory Patent Examiner, Art Unit 1618

/Melissa Perreira/
Examiner, Art Unit 1618